# Title

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**estat lcprob —** Latent class marginal probabilities



## Description

`estat lcprob` is for use after `gsem` but not `sem`.

`estat lcprob` reports a table of the marginal predicted latent class probabilities.

## Menu

Statistics > LCA (latent class analysis) > Class marginal probabilities

## Syntax

`estat lcprob` [ , *options* ]

| *options* | Description |
|---|---|
| `classpr` | latent class probability; the default |
| `classposteriorpr` | posterior latent class probability |
| `nose` | do not estimate SEs |
| `post` | post margins and their VCE as estimation results |
| *display_options* | control column formats, row spacing, and line width |

## Options

`classpr`, the default, calculates marginal predicted probabilities for each latent class.

`classposteriorpr` calculates marginal predicted posterior probabilities for each latent class. The posterior probabilities are a function of the latent class predictors and the fitted outcome densities.

`nose` suppresses calculation of the VCE and standard errors.

`post` causes `estat lcprob` to behave like a Stata estimation (e-class) command. `estat lcprob` posts the vector of estimated margins along with the estimated variance–covariance matrix to `e()`, so you can treat the estimated margins just as you would results from any other estimation command.

*display_options*: `vsquish`, `fvwrap(#)`, `fvwrapon(`*style*`)`, `cformat(%`*fmt*`)`, `pformat(%`*fmt*`)`, `sformat(%`*fmt*`)`, and `nolstretch`.

## Remarks and examples

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See [SEM] **example 50g**, [SEM] **example 53g**, and [SEM] **example 54g**.

## Stored results

`estat lcprob` stores the following in `r()`:

Scalars
- `r(N)` — number of observations

Macros
- `r(title)` — title in output
- `r(classposteriorpr)` — `classposteriorpr`

Matrices
- `r(b)` — estimates
- `r(V)` — variance–covariance matrix of the estimates
- `r(table)` — matrix containing the margins with their standard errors, test statistics, $p$-values, and confidence intervals

`estat lcprob` with the `post` option also stores the following in `e()`:

Scalars
- `e(N)` — number of observations

Macros
- `e(title)` — title in output
- `e(classposteriorpr)` — `classposteriorpr`
- `e(properties)` — `b V`

Matrices
- `e(b)` — estimates
- `e(V)` — variance–covariance matrix of the estimates

## Also see

**[SEM] example 50g** — Latent class model

**[SEM] example 53g** — Finite mixture Poisson regression

**[SEM] example 54g** — Finite mixture Poisson regression, multiple responses

[SEM] **gsem postestimation** — Postestimation tools for gsem